

## DEPARTMENT OF THE ARMY

ST. LOUIS DISTRICT, CORPS OF ENGINEERS
210 TUCKER BOULEVARD, NORTH
ST. LOUIS [MISSIUR] (85)

IL Environmental Protection Agency

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21 July 1982

Division of Water Pollution Control Field Operations Section — Reg. VI

Mr. Michael L. Mauzy, Director Illinois Environmental Protection Agency 2200 Churchill Road Springfield, Illinois 62706 RECEIVED

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Environmental Protection Agency Division of Water Pollution Control Permit Section-Springfield State of Illinois

Dear Mr. Mauzy:

For the past several years the Corps has been studying the problems associated with rising groundwater in the part of the Mississippi River flood plain known as the American Bottoms. This area extends from Alton, Illinois, on the north to Dupo, Illinois, at the southern boundary and from the Mississippi River eastward to the bluffs.

The damage reported to us has consisted exclusively of broken sewer lines and cracked basements. We now have extensive inventories of all known sanitary, combined and storm sewers in the area and also information concerning all structures with basements. As our contractor was preparing the sewer inventory, it was discovered that no sewer information was available for many of the 1/2 mile square grids that we had established to help organize the data. On the inclosed maps, these areas are identified by the symbol "D." From this, we infer that the structures in these areas either do not have indoor plumbing or they are served by individual treatment systems.

So that we can account for all types of damages attributable to high groundwater (and eventually arrive at a value of damages that may be avoided by implementing various alternative plans), we would appreciate receiving whatever information you may have concerning individual treatment systems (or lack of) in the "un-sewered" areas. For our purposes, the finer the detail the better (structures identified by street address would be ideal). We recognize that information from the 1980 census could be useful to us but, from all reports, this type of data will not be published for six months or longer.

In addition, we would welcome your insights regarding techniques or assumptions that could be used for estimating dollar damages to individual treatment systems caused by rising groundwater. For example, in your experience, do septic tanks tend to "float" out of position and require re-installation? Are delivery lines to the tanks likely to be broken? Would

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MSED-BF Mr. Michael L. Mauzy, Director

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increased maintenance be expected (and, if so, how much and at what cost)? Is it likely that such systems would be rendered completely useless, requiring abandonment and tie-in to municipal conveyance and treatment facilities? Can you suggest any way to assign a dollar impact to any health hazard that could result (perhaps, the cost of an immunization program; expected illness rates and associated medical expenses, etc.)?

Again, we would be most grateful for any assistance you could provide us for this aspect of the American Bottoms study. If you have any questions, please call Ron Lindsay of my staff at (314) 263-5926.

Sincerely

BOBBY R. HUGHE

Chief, Planning Branch